

ENVIRONMENTAL TOBACCO SMOKE

A REVIEW OF THE LITERATURE

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Allergy

Although some individuals are annoyed by the sight and smell of tobacco smoke and a few even report experiencing irritation, the existence of human allergens in tobacco smoke has not been established scientifically. This is an extremely important point in the ETS debate because those seeking to ban smoking in public places often do so by claiming that nonsmokers are "allergic" to tobacco smoke.

However, a number of research groups have been unable to conclude that a tobacco smoke allergy in humans exists.²⁰⁶⁻²⁰⁹ In 1980, for example, a group of researchers noted that "direct evidence that tobacco smoke is immunogenic (capable of evoking a specific response) in man is yet to be documented."²¹⁰ A recent report by this same group affirms this conclusion.²¹¹

Claims about tobacco allergy stem primarily from studies in which tobacco leaf extract has been reported to cause allergic skin responses in some people, usually in those who already experience allergic reactions to other substances such as weeds.²¹²⁻²¹⁴ However, as an English immunologist pointed out, there are "great difficulties" in determining whether positive reactions to tobacco leaf extracts are relevant to clinical responses to tobacco smoke.²⁰⁹ Although he noted that there may be substances in tobacco smoke which could "theoretically" act as

such agents, he concluded that "there is no proof that the specific sensitization to tobacco smoke exists." Recent research affirms this point. Scientists reported in 1988 that tobacco leaf sensitivity was not associated with decreased pulmonary function in allergic asthmatics.²¹⁵

It has also been hypothesized that tobacco smoke is capable of provoking asthma as an allergic reaction.²¹⁶⁻²¹⁷ However, a Swedish specialist concluded that such results are not proof of a tobacco allergy because the studies, which used tobacco extracts, did not differentiate between non-specific and true allergic reactions in evaluating the results of skin tests and bronchial provocation.²¹⁸ Consequently, he stated, "for the present, the question as to whether allergy to cigarette smoke exists or not should be kept open."

Certainly, there appear to be people who may be sensitive to tobacco smoke, but personal annoyance and emotional reactions should not be confused with genuine allergic reactions.

In many cases, the individual may be responding to high room temperatures, lack of ventilation, or even to the mere sight of tobacco smoke. Indeed, Dr. John Salvaggio, the director of an allergic disease center in the U.S., has suggested that reported reactions to tobacco smoke may be irritative rather than allergic. After reviewing the studies on the allergy question, he concluded that "there is no proof that tobacco smoke is allergenic in man."²¹⁹

Accordingly, it is not surprising that researchers at the Mayo Clinic failed to find any evidence of tobacco smoke allergies in their tests of subjects who considered themselves allergic to tobacco and tobacco smoke.²²⁰ It has been pointed out in other studies that people who claim to be "smoke sensitive" did not react more frequently to tobacco leaf or smoke extract than those who are "smoke resistant."²²¹

On the basis of these data, it must be questioned what people really mean when they say they are "allergic" to tobacco smoke. They may simply not like the sight and smell of tobacco smoke and interpret this to mean that they are "allergic" to environmental tobacco smoke. But, as has been pointed out, such personal reactions should not be regarded as true tobacco smoke allergies.

Sick Building Syndrome

Advocates of smoking restrictions in the workplace commonly argue that ETS exposure gives rise to a number of complaints, including headaches, nausea, coughs, sore eyes and breathing difficulties. However, recent research indicates that this complex pattern of symptoms, the so-called "sick building syndrome", commonly occurs in modern office buildings whether or not smokers are present.²²²⁻²²⁴

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